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Christi A. Butner

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Roth

Group Art Unit: 2175

Serial No.: 09/938,714

Examiner: Mizrahi, Diane D.

Filed: August 23, 2001

Docket No.: 1392/10/22

Confirmation No.: 1777

For: SYSTEM AND METHOD FOR ACCESSING BIOLOGICAL DATA

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DECLARATION OF PRIOR INVENTION PURSUANT TO 37 C.F.R. § 1.131

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Chantal Roth, hereby declare as follows:

1. I am the sole inventor of the invention disclosed and claimed in U.S. Patent Application No. 09/938,714 filed August 23, 2001, which relates to systems, search engines, methods, and computer program products for searching a relational database of biological information.

2. I have had the opportunity to review the Official Action mailed March 1, 2005 from the U.S. Patent and Trademark Office for the above-referenced U.S. patent application.

3. I certify that the above-captioned U.S. Patent Application Serial No. 09/938,714 was made in the United States.

4. I have also reviewed U.S. Patent No. 6,697,818 (the '818 Patent) cited by the U.S. Patent and Trademark Office in the Official Action mailed on March 1, 2005.

5. The invention embodied in claims 1-21 of the subject U.S. patent application was invented prior to the earliest claimed priority date of June 14, 2001 of the '818 Patent.

6. Attached hereto as **Exhibit A** and **Exhibit B** are true and accurate copies of the pages of presentations produced using the MICROSOFT® POWERPOINT® software. **Exhibits A** and **B** describe the operation and interconnection of screen displays, computers, modules, and databases involving the subject matter embodied in the pending claims. Further, **Exhibits A** and **B** provide evidence of the subject matter recited in the pending claims and predates the earliest claimed priority date of June 14, 2001 of the '818 Patent. Also, attached hereto are second copies of **Exhibits A** and **B** which have been marked-up in red ink for providing numerals used herein to refer to particular areas of the exhibits.

7. **Exhibits A** and **B** generally show systems and related methods for searching a relational database of biological information. For example, referring to the marked-up copy of **Exhibit A**, reference numeral **1** designates a database of biological information. Further, referring to the marked-up copy of **Exhibit B**, reference numeral **2** generally designates different databases of biological information. In particular, for example, databases **2** shown in **Exhibit B** include the GENBANK® database and the SAGE (Systematic Assessment of Geriatric

drug use via Epidemiology) database. **Exhibit B** also shows a data warehouse **3**, which may contain the biological information contained within databases **2**.

8. Referring to **Exhibit A**, reference numeral **4** generally designates various components of a server computer. The server computer includes database **1**.

9. Referring to **Exhibit B**, reference numeral **5** designates a screen display produced by a client computer which allows an operator to generate a structured language query in extensible markup language (XML) for searching the biological information contained within databases **2**. Screen display **6** includes an example of XML output corresponding to the example search information shown in screen display **5**.

10. Although a search engine is not specifically shown in **Exhibit A** or **Exhibit B**, a search engine is inherently disclosed by the screen displays and modules shown in the exhibits. For example, screen display **5** of **Exhibit B** illustrates the results of the structured language query for searching the biological information. Thus, a search engine is inherent to the system shown in **Exhibit B**. Further, it is inherent to the example of **Exhibit B** that the query for searching is transferred to a search engine.

11. Although a database graph generation module and a database graph are not specifically shown in **Exhibit A** or **Exhibit B**, evidence of a database graph generation module and a database graph is supported by the screen displays and modules shown in the exhibits. The search engine of the system shown in **Exhibit B** utilizes a database graph generation module for generating a database graph. Reference numeral **9** of **Exhibit B** generally designates the generated

code including classes, which requires creation of a database graph. Further, screen display **5** shows the output of multiple relational database tables, which also requires creation of a database graph.

12. Further, although a joins module is not specifically shown in **Exhibit A** or **Exhibit B**, evidence of a joins module is supported by the screen displays and modules shown in the exhibits. A module for implementing joins is inherent for running a query to the search engine as shown in the exhibits. For example, joins are necessary to convert the data of different types in databases **2** together into an XML format, as shown in **Exhibit B**. The server computer shown in **Exhibit B** also runs a structured query language (SQL) search on databases **2** based on the joins. Joins are necessary to return the result of the search of multiple databases **2** in a meaningful way.

13. Although not specifically shown in the exhibits, the database graph of the system shown in the exhibits is utilized for calculating the shortest path between nodes specified in the structured language query.

I hereby declare that all statements herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

By: 

Serial No. 09/938,714

Chantal Roth

Date: 8/25/05